



Docket No. 4208-4184

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): Simelius

Group Art Unit: TBA

Serial No.: 10/817,198

Examiner: TBA

Filed: April 2, 2004

For: SYSTEM AND METHOD FOR HEALTH ANALYSIS

**INFORMATION DISCLOSURE STATEMENT**

Mail Stop DD  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Information Disclosure Statement is filed in accordance with 37 C.F.R. §§1.56, 1.97 and 1.98. The items listed on Form PTO-1449, a copy of which is enclosed, are made of record to assist the Patent and Trademark Office in its examination of this application. The Examiner is respectfully requested to fully consider the items and to independently ascertain their teaching.

1. ☐ For each of the following items listed on the enclosed copy of Form PTO-1449 that is not in the English language, an English language translation of that item or a portion thereof or a concise explanation of the relevance of that item is enclosed:
2. ☐ For each of the following items listed on the enclosed copy of Form PTO-1449 that is not in the English language, a concise explanation of the relevance of that item is incorporated in the specification of the above-identified application.
3. ☐ Any copy of the items listed on the enclosed copy of Form PTO-1449 that is not enclosed with this Information Disclosure Statement was previously cited by or submitted to the Patent and Trademark Office in application Serial No. \_\_\_\_\_, filed \_\_\_\_\_.
4. ☒ No fee is due under 37 C.F.R. §1.17(p) for this Information Disclosure Statement since it is being filed in compliance with:  
☐ 37 C.F.R. §1.97(b)(1), within three months of the filing date of a national application other than a CPA; or

- ☐ 37 C.F.R. §1.97(b)(2), within three months of the date of entry into the national stage as set forth in §1.491 in an international application; or
- ☒ 37 C.F.R. §1.97(b)(3), before the mailing date of a first Office action on the merits; or
- ☐ 37 C.F.R. §1.97(b)(4) before the mailing date of a first office action after the filing of an RCE under §1.114.
5. ☐ No fee is due under 37 C.F.R. §1.17(p) for this Information Disclosure Statement since it is being filed in compliance with 37 C.F.R. §1.97(c), after the period specified in paragraph 4 above but before the mailing date of a final action or a Notice of Allowance (where there has been no prior final action), and is accompanied by one of the certifications pursuant to 37 C.F.R. §1.97(e) set forth in paragraph 9 below.
6. ☐ A fee is due under 37 C.F.R. §1.17(p) for this Information Disclosure Statement since it is being filed in compliance with 37 C.F.R. §1.97(c), after the period specified in paragraph 4 above but before the mailing date of a final action or a notice of allowance (where there has been no prior final action):
- ☐ A check in the amount of \$180.00 is enclosed in payment of the fee.
- ☐ Charge the fee to Deposit Account No. 13-4500, Order No. \_\_\_\_\_. A  
DUPLICATE COPY OF THIS SHEET IS ATTACHED.
7. ☐ A fee is due under 37 C.F.R. §1.17(p) for this Information Disclosure Statement since it is being filed in compliance with 37 C.F.R. §1.97(d), after the mailing date of a final action or a notice of allowance, whichever comes first, but before payment of the issue fee, and is accompanied by:
- a. one of the certifications pursuant to 37 C.F.R. §1.97(e) set forth in paragraph 9 below; and
- b. the fee due under 37 C.F.R. §1.17(p) which is paid as set forth in paragraph 11 below.
8. ☐ This Information Disclosure Statement is being filed in compliance with:
- a. ☐ 37 C.F.R. §1.313(b)(3) or §1.313(c)(1), after the issue fee has been paid and information cited in this Information Disclosure Statement may render at least one claim unpatentable and is accompanied by the attached Petition To Withdraw Application From Issue and fee pursuant to 37 C.F.R. §1.17(h);
- b. ☐ 37 C.F.R. §1.313(c)(2) or §1.313(c)(3), after the issue fee has been paid and information cited in this Information Disclosure Statement is to be considered in a Request for Continued Examination (RCE) or a Continuation application upon abandonment of the instant application and is accompanied by the attached Petition To Withdraw Application From Issue and fee pursuant to 37 C.F.R. §1.17(h).

- c. ☐ The fee due under 37 C.F.R. §§1.17(h) is paid as set forth in paragraph 11 below.
9. ☐ I hereby certify that each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement.
- ☐ I hereby certify that no item of information in the Information Disclosure Statement filed herewith was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of this Information Disclosure Statement.
10. ☐ This document is accompanied by ☐ a Search Report ☐ Communication which was cited in a corresponding ☐ PCT or ☐ Foreign counterpart application
11. ☐ A check in the amount of \$ \_\_\_\_\_ is enclosed in payment of the fees due under 37 C.F.R. §§1.17(h) and 1.17(p).
- ☐ Charge the fees due under 37 C.F.R. §§1.17(h) and 1.17(p) to Deposit Account No. 13-4500, Order No. \_\_\_\_\_. A DUPLICATE COPY OF THIS SHEET IS ATTACHED.
- ☒ The Commissioner is hereby authorized to charge any additional fees which may be required for this Information Disclosure Statement, or credit any overpayment to Deposit Account No. 13-4500, Order No. 4208-4184. A DUPLICATE COPY OF THIS SHEET IS ATTACHED.

Respectfully submitted,  
MORGAN & FINNEGAN, L.L.P.

Dated: April 23, 2004

By: \_\_\_\_\_

Angus R. Gill  
Registration No. 51,133

Correspondence Address:

MORGAN & FINNEGAN, L.L.P.  
345 Park Avenue  
New York, NY 10154-0053  
(212) 758-4800 Telephone  
(212) 751-6849 Facsimile



<b>FORM PTO-1449</b>  <b>INFORMATION DISCLOSURE CITATION</b>	Attorney Docket: 4208-4184	Serial No.: 10/817,198
	Applicant: Simelius	
	Filing Date: April 2, 2004	Group Art Unit: TBA

### U.S. PATENT DOCUMENTS

Examiner Initial	Patent Number	Issue Date	Name	Class	Sub-Class	Filing Date

### FOREIGN PATENT DOCUMENTS

Examiner Initial	Patent Number	Publication Date	Country	Class	Sub-Class	Translation
						<input type="checkbox"/> Yes <input type="checkbox"/> No

### OTHER DOCUMENTS (Including Author, Title, Date, etc.)

	Noninvasive Imaging of Cardiac Transmembrane Potentials Within Three-Dimensional Myocardium by Means of a Realistic Geometry Anisotropic Heart Model, Bin He, Guanglin Li, Xin Zhang. IEEE Transactions on Biomedical Engineering, Vol. 50, No. 10, October 2003
	Noninvasive Localization of the Site of Origin of Paced Cardiac Activation in Human by Means of a 3-D Heart Model, Guanglin Li, Xin Zhang, Jie Lian, Bin He. Communications, IEEE Transactions on Biomedical Engineering, Vol. 50, No. 9, September 2003
	Localization of the Site of Origin of Cardiac Activation by Means of a Heart-Model-Based Electrocardiographic Imaging Approach, Guanglin Li, Bin He. IEEE Transactions on Biomedical Engineering, Vol. 48, No. 6, June 2001
	Noninvasive Three-Dimensional Activation Time Imaging of Ventricular Excitation by Means of A Heart-Excitation Model, Bin He, Guanglin Li, Xin Zhang. Institute of Physics Publishing, Physics in Medicine and Biology 47 (2002) 4063-4078
	Spatiotemporal Characterization of Paced Cardiac Activation with Body Surface Potential Mapping and Self-Organizing Maps, K. Simelius, M. Stenroos, L. Reinhardt, J. Nenonen, I. Tiera, M. Makijarvi, L. Toivonen, T. Katila. Physiol. Meas. 24, 805-816, 2003
	Baseline Reconstruction for Localization of Rapid Ventricular Tachycardia From Body Surface Potential Maps, T. Jokiniemi, K. Simelius, J. Nenonen, I. Tiera, L. Toivonen, T. Katila. Physiol. Meas. 24, pp. 641-651, 2003
	Non-Invasive Arrhythmia Risk Evaluation in Clinical Environment, H. Vaananen, P. Korhonen, J. Montonen, M. Makijarvi, J. Nenonen, L. Oikarinen, K. Simelius, L. Toivonen, T. Katila. Herzschrittmacher und Electrophysiologie 11, 229-234, 2000
	Late QRS Activity in Signal-Average Magnetocardiography, Body Surface Potential Mapping, and Orthogonal ECG in Postinfarction Ventricular Tachycardia Patients, P. Korhonen, I. Tiera, K. Simelius, H. Vaananen, M. Makijarvi, J. Nenonen, T. Katila, L. Toivonen. Ann. Noninvasive Electrocardiol. 7, 389-398, 2002
	A Hybrid Model of Cardiac Electrical Conduction, K. Simelius, J. Nenonen, V. mantynen, J.C. Clements, B.M. Horacek. Helsinki University of Technology Report TKK-F-A829, 2004
	Modeling Cardiac Ventricular Activation, K. Simelius, J. Nenonen, B.M. Horacek. International J. on bioelectromagnetism 3, pp. 51-58, 2001

Examiner	Date Considered
----------	-----------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP §609.  
Draw line through citation if not in conformance and not considered.  
Include copy of this form with next communication to Applicant.



Docket No. 4208-4184

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): Simelius

Group Art Unit: TBA

Serial No.: 10/817,198

Examiner: TBA

Filed: April 2, 2004

For: SYSTEM AND METHOD FOR HEALTH ANALYSIS

**CERTIFICATE OF MAILING (37 C.F.R. §1.8(A))**

Mail Stop DD  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

I hereby certify that the attached:

1. Information Disclosure Statement;
2. Form PTO-1449;
3. Ten (10) Cited References; and
4. Return Receipt Postcard

along with any paper(s) referred to as being attached or enclosed and this Certificate of Mailing are being deposited with the United States Postal Service on date shown below with sufficient postage as first-class mail in an envelope addressed to the: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Respectfully submitted,  
MORGAN & FINNEGAN, L.L.P.

Dated: April 23, 2004

By: \_\_\_\_\_

Angus R. Gill  
Registration No. 51,133

**Correspondence Address:**

MORGAN & FINNEGAN, L.L.P.  
345 Park Avenue  
New York, NY 10154-0053  
(212) 758-4800 Telephone  
(212) 751-6849 Facsimile